

REMARKS/ARGUMENTS

Favorable consideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 4-6, 10-12, 16 and 32-46 are presently pending in this application, Claims 1-3, 20 and 22-31 having been canceled, and Claims 4, 10, 16, 32, 33, 35, 36, 40, 41, 44 and 45 having been amended by the present amendment.

In the outstanding Office Action, Claims 1-4, 10 and 16 were objected to because of informalities; and Claims 1-6, 10-12, 16, 20 and 22-46 were rejected under 35 U.S.C. §103(a) as being unpatentable over Naruse et al. (U.S. Patent 5,914,187) in view of EP 0 361 883 (hereinafter “EP ‘883”).

In response to the objection to Claims 4, 10 and 16, Claims 4, 10 and 16 have been amended to correct the noted informalities. No further objection on that basis is anticipated.

Claims 4, 10, 16, 32, 33, 35, 36, 40, 41, 44 and 45 have been further amended herein, and Applicants respectfully request that Claims 1-3, 20 and 22-31 be canceled without prejudice. These amendments find clear support in the specification, claims and drawings as originally filed, for example, Specification, page 19, line 11, to page 20, line 7, as well as page 74, lines 7-17. Hence, no new matter is believed to be added thereby. If, however, the Examiner disagrees, the Examiner is invited to telephone the undersigned who will be happy to work in a joint effort to derive mutually agreeable claim language.

Before addressing the outstanding rejections based on the cited references, a brief review of Claim 4 as currently amended is believed to be helpful.

Claim 4 is directed to a honeycomb filter for purifying exhaust gases and recites, *inter alia*, “a plurality of columnar porous ceramic members...; and an adhesive layer combining said columnar porous ceramic members with one another and having a plurality of pores adjusting a thermal capacity per unit volume of said adhesive layer such that said thermal

capacity per unit volume of said adhesive layer is lower than a thermal capacity per unit volume of the porous ceramic members.”

By providing an adhesive layer and/or a coating material layer having such thermal capacity, the thermal capacity of a honeycomb filter as a whole is effectively lowered without compromising the mechanical strength of the porous ceramic member, and the adhesive/coating material layer is heated quickly with lesser amount of heat, allowing the porous ceramic member and subsequently the filter as a whole to be heated quickly with lesser amount of heat, providing the porous ceramic filter which better withstands a regenerating process of high-temperature, burning of unevenly accumulated particles in the filter and deters cracking in the porous ceramic filter.

It is respectfully submitted that neither Naruse et al. nor EP ‘883 teaches or suggest “an adhesive layer combining said columnar porous ceramic members with one another and *having a plurality of pores adjusting a thermal capacity per unit volume of said adhesive layer such that said thermal capacity per unit volume of said adhesive layer is lower than a thermal capacity per unit volume of the porous ceramic members*” as recited in amended Claim 4 (emphasis added in italic). The Office Action states that “Naruse et al does not teach the adhesive has thermal capacity per unit volume that is lower than a thermal capacity per unit volume of the porous ceramic member” but simply concludes that “[b]ecause the materials of the adhesive and the plurality of columnar porous ceramic members taught in Naruse et al are also taught in the claimed invention, Naruse et al also teaches the limitation of the adhesive layer having a thermal capacity per unit volume that is lower than the thermal capacity per unit volume of the porous ceramic members.” However, to set the thermal capacity per unit volume of an adhesive layer lower than the thermal capacity per unit volume of the porous ceramic members without compromising the mechanical strength of the filter as a whole, the materials of the adhesive layer and the porous ceramic members are

properly selected, and/or the porosity of the adhesive layer is adjusted to be increased as stated in Applicants' specification.¹ Nowhere is Naruse et al. believed to mention or suggest the thermal capacity per unit volume of an adhesive layer and the thermal capacity per unit volume of porous ceramic members, nor is Naruse et al. believed to identify their thermal capacity per unit volume as a parameter for any improvement. As such, even assuming *arguendo* that a spectrum of candidate materials for the adhesive layer and porous ceramic members are described, it is believed that the thermal capacity per unit volume of an adhesive layer and the thermal capacity per unit volume of the porous ceramic members cannot be adjusted without compromising the mechanical strength of the filer as a whole. Hence, it is believed that the subject matter recited in Claim 4 is distinguishable and unobvious from Naruse et al.

EP '883 is cited for the lack of the thermal expansion coefficients and their mathematical relationships in Claims 1-3, and thus it is believed the subject matter recited in Claim 4 to be distinguishable and unobvious from EP '883.

Likewise, Claims 10 and 16 are believed to include subject matter substantially similar to what is recited in Claim 4 to the extent discussed above. Thus, Claims 10 and 16 are also believed to be distinguishable from Naruse et al. and EP '883.

For the foregoing reasons, Claims 4, 10 and 16 are believed to be allowable. Furthermore, since Claims 5-6, 11-15 and 32-46 depend directly or indirectly from one of Claims 4, 10 and 16, substantially the same arguments set forth above also apply to these dependent claims. Hence, Claims 5-6, 11-15 and 32-46 are believed to be allowable as well.

¹ See Specification, page 46, lines 17-30.

In view of the amendments and discussions presented above, Applicants respectfully submit that the present application is in condition for allowance, and an early action favorable to that effect is earnestly solicited.

Respectfully submitted,

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